No.



9400052

THE UNIVERSALES OF AMERICA

TO ALL TO WHOM THESE: PRESENTS: SHALL COME::

J.R. Simplot Company

There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID CORY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO, THE PAYMENT OF THE REQUIRED FEES AND PERIODIC EPILENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE SECULDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR TING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE VARIETY OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PARTY OF THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LAWNGRASS, JAPANESE

'J-37'

In Testimony Macrost, I have hereunto set my hand and caused the scal of the Hunt Mariety Irotection Office to be affised at the City of Washington, D.C. this twenty-third day of Wharch, in the year of our Lord two thousand one.

alank. Fort

Acting Commissioner Plant Variety Protection Office Agricultural Marketing Service Jan N Sgriculturo

Public reporting burden for this collection of information is estimated to average-30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Office, OIRM, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250.

APPLICATION FOR PLANT VARIETY P	ERVICE	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421) Information is held confidential unti-
(Instructions on rever NAME OF APPLICANT(S) (as it is to appear on the Certificate)	2. TEMPORARY DESIGNATION OF THE PROPERTY OF TH	certificate is issued (7 U.S.C. 2426). ON OR 3. VARIETY NAME 1-37
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)	5. PHONE (Include area cod	e) FOR OFFICIAL USE ONLY
West 5300 Riverbend Ave. Post Falls, ID 83854	208/773-7581	940052 F Date
		Dec. 22, 1993
6. GENUS AND SPECIES NAME 7. FA	MILY NAME (Botanical)	Time N G COO D A.M. R P.M
	ıcea	G / O A.M. P.M F Filing and Examination Fee:
8 CROP KIND NAME (Common Name) Zoysiagrass	9. DATE OF DETERMINATION May 1, 1991	E s 2325
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATIO	N (Corporation, partnership, association, etc.)	1 Dec. 20 1993
Corporation		C Certificateli ee:
11. IF INCORPORATED, GIVE STATE OF INCORPORATION	12. DATE OF INCORPORATION	- : 325°
Idaho	March 1983	V Date
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE	IN THIS APPLICATION AND RECEIVE ALL PAPERS	D January 10, 2001
Dr. A. Douglas Brede West 5300 Riverbend Ave. Post Falls, ID 83854	PHONE (Include a	208/773-7581
b. X Exhibit B, Novelty Statement. c. X Exhibit C, Objective Description of Variety. d. Exhibit D, Additional Description of Variety. e. X Exhibit E, Statement of the Basis of Applicant's Ownership. 1. Seed Sample (2,500 viable untreated seeds). Date Seed Sample g. X Filing and Examination Fee (\$2,150) made payable to "Treasure" 15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY BY BY SOLD BY VARIETY BY SOLD BY VARIETY BY SOLD BY VARIETY BY BY BY BY BY BY	r of the United States."	ED? (See section 83(a) of the Plant Variety
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	17. IF "YES" TO ITEM 16, WHICH CLASSES OF	PRODUCTION BEYOND BREEDER SEED?
X YES NO	X FOUNDATION X	REGISTERED X CERTIFIED
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN YES (If "YES." through Plant Variety Protection Act Pa	THE U.S.?	
19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETE YES (II "YES," give names of countries and dates) X NO	D IN THE U.S. OR OTHER COUNTRIES?	
20. The applicant(s) declare(s) that a viable sample of basic seeds of the request in accordance with such regulations as may be applicable.	his variety will be furnished with the app	lication and will be replenished upon
The undersigned applicant(s) is (are) the owner(s) of this sexual uniform, and stable as required in section 41, and is entitled to pro	ly reproduced novel plant variety, and b tection under the provisions of section 42 o	elieve(s) that the variety is distinct, of the Plant Variety Protection Act.
Applicant(s) is (are) informed that false representation herein can	jeopardize protection and result in penalti	es.
SIGNATURE/OF APPOISANT (Owner(s))	CAPACITY OR TITLE	DATE
H. Hoy Bush	Director of Research	June 30, 1993
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR TITLE	DATE
sibramod Harried	Associate Plant Breede	1 0.1 2 1993

FORM CSSD-470 (5-89) Edition of FORM LS-470, 3-86, is obsolete.

Exhibit 14A

J-37 Japanese Zoysiagrass

'J-37' is a seeded, turf-type zoysiagrass (*Zoysia japonica* Willd.) released by Jacklin Seed of Post Falls, ID, a division of J.R. Simplot. J-37 originated from four Jacklin Seed breeding lines:

(1) ZJ-11 (a germplasm release from the USDA furnished in return for a research grant from Jacklin Seed Company on October 30, 1988), (2) JZ-1 (Japanese germplasm acquired in November 1987), (3) ZJ-46 (Korean germplasm acquired July 26, 1988), and (4) ZJ-9 (Chinese germplasm acquired May 16, 1988 from Qin Huang Dao, China). Breeding procedures used in the development of J-37 included: the assembly of germplasm sources, selection of single plants within the maternal progenies and development of a modified multiclone synthetic.

Seed of each breeding line was started in our Post Falls, ID greenhouse and transferred to separate isolated blocks in Visalia, CA in 1989. About 10% of the plants were undesirable and were removed from the nursery blocks. In May 1991, clones with abundant purple seed heads and improved texture and color were selected. Ten percent of the material was selected from JZ-1, 5% from ZJ-46, 5% from ZJ-9, and the rest from ZJ-11. Selected clones were broken into pieces and blended together, then used to sprig a ¼-acre selection block near Lakeland, GA, in May, 1991. In early 1992, the block was rogued to increase uniformity, removing about 25% of the plants based on unattractive phenotypes and white seed heads.

To improve uniformity, in June 1992, 75 clones were selected from this isolated block based on uniform seed head color, texture, turf characteristics, and ample seed yield. These were sprigged into a small spaced-plant breeder block. Before anthesis in 1993, several plants (7%) were rogued based on low density and mole cricket damage. First breeder seed was produced in June 1993. After the 1993 harvest, the breeder block was increased vegetatively to 1/4 acre in size and allowed to fill in. In 1998, breeder seed was used to plant a 1-acre foundation field near Lakeland, GA.

J-37 is a uniform and stable variety. All seed lots evaluated have produced turf of comparable quality and acceptable uniformity. As with any cross-pollinated, sexually produced species, segregation and recombination will produce some plants which deviate from the mean in each generation. Conspicuous variants plants or segregants are rogued from seedstock fields to maintain continued uniformity and stability. Although they will occur in each generation, the frequency of these variants in J-37 is less than 5%.

Exhibit 14 B J-37 Japanese Zoysiagrass Novelty Statement

J-37 is a uniform, seed-propagated variety with a medium dark green color, medium density and a medium broad texture under turf conditions. J-37 is most similar to Common, both of which have predominately purple pigmentation on the seedheads and stolons. The source of Common used was Sunrise brand imported from China (Korean Common was unavailable). J-37 differs from Common on the following botanical characteristics:

- 1. The number of spikelets per spike was significantly less on J-37 than on Common during three years of data collection. In 1993, J-37 averaged 32.7 spikelets vs. 45.6 spikelets on Common; in 1994, J-37 averaged 24.85 spikelets vs. 36.00 spikelets on Common; and in 1995, J-37 averaged 35.48 spikelets vs. 42.26 spikelets on Common (Tables 1,4 and 7).
- 2. The glume length of J-37 was significantly larger than Common over three years of data collection. In 1993, the glume length of J-37 was 3.7 mm vs. 2.9 mm for Common; in 1994, the glume lengths were 3.73 mm for J-37 and 2.90 mm for Common; and in 1995, this was 3.26 for J-37 and 2.23 for Common (Tables 1,4 and 7).
- 3. The leaf width of J-37 was significantly narrower than that of Common during three years of data collection. In 1993, J-37 had a leaf width of 4.4 mm vs. 5.1 mm in Common; in 1994, J-37 was 4.72 mm vs. 5.53 for Common; and in 1995, J-37 was 5.35 mm vs. 6.00 mm for Common (Tables 1,3 and 6).
- 4. J-37's spike length was significantly longer than Common during two years of data collection. In 1993, J-37 was 10.8 cm vs. 9.5 cm for Common; in 1994, J-37's spike length was 13.00 cm versus 8.50 cm for Common. In 1995, this was non-significant difference, although J-37's 18.02 cm spike length was longer than Common's 17.04 cm spike length (Tables 1,2 and 6).

U.S. DEPARTMENT OF AGRICULTURE PLANT VARIETY PROTECTION OFFICE, AMS, USDA NATIONAL AGRICULTURAL LIBRARY Bldg,. Rm. 500 10301 BALTIMORE Blvd. BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF CULTIVARS ZOYSIAGRASS

(Zoysia spp.)

NAME OF APPLICANT(S)	TEMPORARY DI	ESIGNATION	VARIETY NAME
Jacklin Seed Company	J-37		<i>√-37</i>
ADDRESS (Street and no., or R.F.D. No., City State and ZIP Code			FOR OFFICIAL USE ONLY
·			PVPO NUMBER 9400052
W 5300 Riverbend Post Falls Idaho 83854			19003d
Place the appropriate number that describes the varietal cl measurements, should represent those that are typical for recognized color fan may be used to determine plant color	the variety Measured	data should be for SPAC ked with an asterisk * at	LED FLAMIS. Royal Horizontal and bootery of any
Good grangested South Vorgen) Chin	050	3=Emerald (Vegetat	tively propagated)
1=Common (Seed propagated, South Korean) Chin	esc	5 Emerata (vegetati	propagation,
2=Meyer (Vegetatively propagated)		4=Other:	
, , , , , , , , , , , , , , , , , , , ,			
1. SPECIES			
<u>1</u>	Zoysia matrella	3= Zoysia tenufolia	4 = OTHER:
2. PLOIDY			
1=Diploid 2=1	letraploid	40 Di	iploid Chromosome Number
3. ADAPTATION (0=Not tested, 1= Not adapt	ed, 2= adapted)		
1 Northwest _0_	North central	_0	Northeast
0 West central 0	Central	_2	East central
2 Southwest 2	South central	_2	Southeast
Other region			
4. RHIZOMES:			
2 1=No rhizomes 2= Weakly rhiz	comatous (Common)	3= Moderate	ely rhizomatous (Meyer)
4= Heavily rhizomatous (Emerald)			
cm. spread in 1 year; Test area			

					· · · · · · · · · · · · · · · · · · ·
5. STC	DLONS AND SHOOT	ΓS:			
<u>2▲1</u>	cm Length of third in	nternode		<u>2 ▲ 4</u>	mm Maximum diameter of third internode
_ <u>0 🛦 3</u>	cm Shorter than chec	ck variety: 1_			mm Narrower than check variety:
	Same as check varie	ty:			same as check variety:1_
	cm Longer than chec	ck variety:			Wider than check variety
95	Percentage plants wi	th anthocynanin pigme	ntation		Number of growing points / node cluster
		·			
6. LAI	TERAL LEAF:				
_5	Ligule hair length	1=short	5=medium		9=long
110	mm Length (3 rd or 4 th	h leaf below apical mer	istem)	<u>5▲4</u>	mm Width (at widest part)
248_	mm Shorter than che	ck variety: 1		_0▲6_	mm Narrower than check variety: 1
	Same as check variet	y:			Same as check variety:
288_	mm Longer than che	ck variety: 2		<u>1 🛦 7</u>	mm Wider than check variety: 2
<u>_6_</u>	Width class 1=F.	ine	3=medium fine	('Emerald'	') 5-Medium ('Meyer')
	7=C	Coarse	9=Very coarse		
5	Color 1=I	Light green (Emerald)	3=Medium ligh	nt green	5= Medium dark green (Common)
			_	•	
		Dark green (Meyer)	9= Dark blue g		_
	Winter color 1= 0	Gold 3=Light l	orown 5=Dark	brown 7=	=Purple 9=Green
7. FLA	GL LEAF:				All land are qui
5	Ligule hair length	1=short	5=medium		9=long
60.7	mm Length			<u>1 🛦 3</u>	mm Width (at widest part)
<u>9 4 2</u>	mm Shorter than chec	ck variety: 1_		0 🛦 1	mm Narrower than check variety: 1
. *	Same as check variety	v:			Same as check variety: 2
10 & 4	mm Longer than chec				mm Wider than check variety:
<u>19▲4</u>	min Longer than chec	x variety2_		.	min wider than check variety
8. SPIK	Œ:				
18 <u>▲02</u>	mm Length from fl	ag leaf collar to tip			mm Width (at widest part)
	mm Shorter than ch	neck variety:			mm Narrower than check variety:
	Same as check vari	ety:			Same as check variety:
10_	mm Longer than ch	eck variety: 1			mm Wider than check variety:
<u>35▲5</u>	Number of spikelet	s per spike		<u>0 🛦 4</u>	Number of seedheads per cm ²
<u>7▲2</u>	Fewer than check v	rariety:_1			Fewer than check variety:
	Same as check varie	ety:	•		Same as check variety:
	More than check va	rriety:			More than check variety:

					9400052
8. SPI	IKE: (continued)				
100	Percentage of plants with purple anther	s		Percentage of plants with yellow	anthers
· '	Percentage of plants with another color	(specify color):	·		
95	Percentage of plants anthocyanin pigme	entation			
9. SEI	ED				
2057	Number of seeds per gm				
	Fewer than check variety:				
	Same as check variety:				
528	More than check variety: 1				
<u>3 ▲ 3</u>	mm Glume length		1 🛦 3	mm Glume width	
	mm Shorter than check variety:			mm Narrower than check variety:	
	Same as check variety:			Same as check variety:	
1 🛦 0	mm Longer than check variety: 1		<u>0 ▲ 5</u>	mm Wider than check variety: 1	
	· 		_===	· 	
	Percentage of glumes with awns			mm Awn length	
10. CC	OLD TOLERANCE:				
<u>7</u>	Cold tolerance: 1=Low	3=Moderatel	ly low ('Er	nerald') 5=Moderate	
:	7=Moderately l	nigh ('Mever').	'Common	') 9=High	
	• • • • • • • • • • • • • • • • • • • •	0 (),			
11. DI	SEASE AND INSECT: (1 = Least resi	stant, 9 = Most	resistant)	- Address - Addr	LEPTER PRODUCTION AND ADDRESS OF SUPERIOR ADDRESS OF SUPERIOR AND ADDRESS OF SUPERIOR AND ADDRESS OF SUPERIOR ADDRESS
_0	Brown patch (Rhizoctonia solani)	_0	Melting	out (Helminthosporium spp.)	
0	Dollar spot (Sclerotinia homeocarpa)	_0	Spring d	ead spot	
_0	Rust (Puccinia zoysiae)	_0	Billbugs	(Sphenophorus ventus-vestitus)	
0	Fading out (Curvularia spp.)	_0_	Chinchb	ugs (<i>Blissus</i> spp.)	
0	Other disease or pest (specify):			- · · · · · · · · · · · · · · · · · · ·	

12. EXPERIMENTAL DESIGN:

Please explain the methods, conditions and experimental designs utilized to collect the data for the variety described on this form.

Measurements from 1993 are from plants randomly selected from seed production trials near Lakeland, GA.

Measurements from 1994 and 1995 are from plants in a spaced plant PVP trial which was planted in 1993 near Lakeland, GA. This trial was planted in 6 replications of 10 plants per rep and had 5 varieties.

Table 1. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1993. Data from plants randomly selected from seed production research trials near Lakeland, Georgia.

	Avera	ge leaf	Spike	Seedhead	Number of	Ligule hair	Seedheads
Cultivar	width	length	length	length	spikelets per spike	length	per cm ²
	mm	cm	cm	cm	no	mm	
J-37	4.4 b	7.8 b	10.8 a	4.0	32.7 c	3.2 a	0.4
J-36	5.3 a	7.6 b	8.9 b	3.8	37.9 b	3.3 a	0.7
W-3-2	5.1 a	10.3 a				3.3 a	
Meyer	3.3 c	5.5 c			•	2.4 b	
Common	5.1 a	9.1 ab	9.5 b	3.8	45.6 a	3.3 a	

	Weight of	Stolon i	nternođe		Glume	
Cultivar	100 seeds	length	width	length	width	length/width
	mg	cm	mm	mm	mm	
				9		
J-37	82.8 a	7.5 a	0.5 d	3.7 a	1.1 a	3.36
J-36	75.8 b	2.7 b	1.9 a	3.0 b	1.1 a	2.73
W-3-2		1.9 c	1.7 b			
Meyer	•	1.9 c	1.2 c	•	•	
Common	60.1 c			2.9 b	1.0 b	2.9

Means were separated using the LSD procedure at the 0.05 level; means followed by the same letter are not significantly different.

Table 2. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1994. Data from spaced planted PVP trial near Lakeland, Georgia.

	Spike	Seedhead	Sheath	Latera	l leaf
Cultivar	length	length	length	length	width
***	mm	cm	cm	cm	mm
J-37	13.00 a	3.71 a	2.97 ab	10,5 ab	4.72 b
Common	8.50 bc	3.00 a	3.43 a	11.3 a	5.53 a
W-3-2	10,48 ab	3.25 a	2.54 b	9.1 bc	4.53 b
Meyer	5.50 с	1.50 b	2.44 b	7.6 cd	3,72 c
J-36	10.53 ab	2.50 ab	2.45 b	7.3 d	4.92 b
LSD 0.05	3.618	1,470	0.632	1.70	0.386

Table 3. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1994. Data from spaced planted PVP trial near Lakeland, Georgia.

		Stolon	Stolon	internode	Stolo	n leaf
Cultivar	Stolon	length	length	width	length	width
	#	cm	mm	mm	mm	mm
J-37	3.1	21.61 ab	21.72	1.25 ab	29.5	3.0
Common	2.0	27.50 a	24.67	1.40 a	33.6	3.0
W-3-2	3.3	12.89 b	16.89	1.19 ab	20.9	3.1
Meyer	2.0	17.77 ab	17.78	1.33 a	28.0	2.8
J-36	3.2	15.54 ab	17.90	1.10 b	25.5	3.3
LSD 0.05	ns	12.356	ns	0.229	ns	ns

Table 4. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1994. Data from spaced planted PVP trial near Lakeland, Georgia.

		Glume		Spikes per	Weight of
Cultivar	width	length	length/width	spikelet	100 seeds
	mm	mm	ratio	#	mg
J-37	1.08 c	3.73 a	3.56 a	24.9 bc	46.95 b
W-3-2	1.21 a	3.33 b	2.78 b	27.2 b	37.38 (
Meyer	0.99 d	2.66 d	2.72 b	20.0 c	27.50 d
J-36	1.16 b	2.97 с	2.60 bc	24.1 bc	35.60
Common	1.24 a	2.90 c	2.36 с	36.0 a	59.60 a
LSDoos	0,047	0.185	0.256	7.13	5.986

Table 5. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1995. Data from spaced planted PVP trial near Lakeland, Georgia.

	÷	Stolon	Stolon in	nternode	Stolo	on leaf	Sheath
Cultivar	Stolon	length	length	width	length	width	length
	#	cm	mm	mm	mm	mm	cm
en e							
J-37	16.9	41.28 a	21.40 ab	2.35 ab	39.6 a	4.00 ab	13.55 a
W-3-2	13.5	44.84 a	24.89 a	2.63 a	32.3 b	3.74 bc	14.36 a
Common	12.4	45.34 a	23.63 ab	2.44 ab	34.1 b	4.31 a	13.12 a
J-36	12.7	28,56 b	18 . 61 b	2.14 b	34.0 b	3.47 c	13.18 a
Meyer	16.1	37.36 ab	18.06 b	2.19 b	23.3 с	2.69 d	7.79 b
LSD 0.05	ns	8.878	6.016	0.408	3.97	0.464	1.404

Table 6. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1995. Data from spaced planted PVP trial near Lakeland, Georgia.

	Seedhead	Spike	Lateral leaf		Flag	Flagleaf	
Cultivar	length	length	length	width	length	width	length/width
	mm	cm	cm	mm	mm	mm	ratio
J - 37	44.75 a	18.02 a	10.99 b	5.35 b	60.70 b	1.28 ab	52.44 a
W-3-2	43.11 ab	18.67 a	13.18 a	4.63 c	70.00 a	1.39 ab	57.16 a
Common	39.18 Ь	17.04 a	13.47 a	6.00 a	69.94 a	1.41 ab	53.75 a
J-36	43.67 ab	17.55 a	11,97 ab	5.83 a	68.94 ab	1.83 a	49.95 ab
Meyer	31.00 c	10.89 b	8.11 c	3.69 d	41.27 c	1.23 b	36.62 b
LSD _{0.05}	4.614	1.698	1.648	0.389	8.904	0.587	14.18

Table 7. Morphological characteristics of zoysiagrass (*Zoysia japonica* Willd.) cultivars, in 1995. Data from spaced planted PVP trial near Lakeland, Georgia.

	Weight of	Spikes per	•	Glume	
Cultivar	100 seeds	spikelet	width	length	length/width
	mg	#	mm	mm	ratio
J-37	48.62 b	35.5 с	1.31 a	3.26 a	2.55 c
Meyer	53.00 b	29.8 e	0.72 d	2.26 с	3.23 a
W-3-2	111.94 a	31.8 d	0.90 b	2.59 b	2.94 b
Common	65.41 b	42.7 b	0.82 c	2.23 c	2.77 b
J-36	69.52 b	45.3 a	0.87 bc	2.14 c	2.51 c
LSD 0.05	38.04	1.78	0.062	0.139	0.201

EXHIBIT 14 E

J-37 Zoysiagrass

Ownership of the Variety

J-37 zoysiagrass was bred and developed by Susan Samudio, with cooperation by A. Douglas Brede, both of Spokane, Washington. All rights and interest in the variety, J-37, are assigned by the breeders by their signature below to Jacklin Seed Company, West 5300 Riverbend Avenue, Post Falls, Idaho 83854. The Commissioner, Plant Variety Protection Office is requested to issue the plant variety certificate in accordance within.

Executed	
State of Idaho	

Susan Samudio

A. Douglas Brede

COUNTY OF KOOTENAI

Before me a Notary Public for the county of Kootenai, Idaho, personally appeared <u>Susan Samudio and A Douglas Brede</u>, known to me to be the persons who executed and acknowledged it to be of his/her free act and deed.

WITNESS my hand and seal this 9th day of July 1993

Line 4. L

Notary Public

Commission expires: 5/16/96

ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATE APPLICATION

- 1. JACKLIN SEED COMPANY, an Idaho corporation, having its principal place of business in Post Falls, Idaho, owns a variety of Zoysiagrass for which an application for a plant variety certificate is pending under the name *J-37* under the United States Department of Agriculture, Plant Variety Protection Office, under Registration No. 9400052.
- 2. J.R. SIMPLOT COMPANY, a Nevada corporation, whose address is One capital Center, 999 Main Street, Suite 1300, Boise, Idaho 83702, desires to acquire said application and the pending registration thereof.

In consideration of the foregoing and other good and valuable consideration, receipt of which is hereby acknowledged, Jacklin Seed Company does hereby assign to J.R. Simplot Company all right, title and interest of Jacklin Seed Company in and to the pending registration for a plant variety protection certificate described herein.

IN TESTIMONY WHEREOF, JACKLIN SEED COMPANY hereunto sets it hand and seal the day and year set opposite its signature.

JACKLIN SEED COMPANY

Date: September 30, 1997	By Duane A. Jacklin, President
State of Idaho)	
) ss. County of Kootenai)	

On this 30th day of September, 1997, before me, a Notary Public in and for said state, personally appeared Duane A. Jacklin, known or identified to me to be a partner of Jacklin Seed Company, the corporation that executed this instrument, or the person who executed the instrument on behalf of said corporation and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public in and for the State of

Idaho, residing at _____ Commissionexpires: